## PUBLIC HEALTH DEPARTMENT[641]

## Adopted and Filed

Pursuant to the authority of Iowa Code section 136C.3, the Department of Public Health hereby amends Chapter 42, "Permit to Operate Ionizing Radiation Producing Machines or Administer Radioactive Materials," Iowa Administrative Code.

Chapter 42 is amended to provide for an endorsement to the general nuclear medicine technologist permit that would allow nuclear medicine technologists to operate computed tomography units for examinations outside of nuclear medicine studies. Currently, nuclear medicine technologists are allowed to administer radioactive materials and to use computed tomography for attenuation correction in relation to the nuclear medicine studies of PET/CT or SPECT/CT but are not allowed to operate radiation machines outside of nuclear medicine studies unless the nuclear medicine technologists also hold a radiography permit. In response to industry desire to allow for flexibility in staffing, nuclear medicine training programs and certification boards have evolved to cover additional aspects of computed tomography into their curriculum and advanced testing options. With this additional training and certification, nuclear medicine technologists would possess the minimum training requirements necessary to perform computed tomography outside of a nuclear medicine study. These amendments define computed tomography and outline the minimum requirements for an endorsement to the general nuclear medicine permit to allow endorsement holders to perform computed tomography outside the scope of nuclear medicine. There is no change in scope of practice for any other permit modalities. These amendments were drafted with input from the Iowa Society of Radiologic Technologists and a facility with both a nuclear medicine department and a training program.

Notice of Intended Action was published in the Iowa Administrative Bulletin as **ARC 3074C** on May 24, 2017. No public comment was received. These amendments are identical to those published under Notice of Intended Action.

The State Board of Health adopted these amendments on July 12, 2017.

After analysis and review of this rule making, no impact on jobs has been found.

These amendments are intended to implement Iowa Code chapter 136C.

These amendments will become effective September 6, 2017.

The following amendments are adopted.

ITEM 1. Adopt the following <u>new</u> definitions of "Computed tomography," "Nuclear medicine diagnostic computed tomography endorsement," "PET/CT," and "SPECT/CT" in rule **641—42.2(136C)**:

"Computed tomography" or "CT" means a technique for generating a series of X-ray images taken from different angles and processed with computer software.

- 1. "Diagnostic computed tomography" means the use of computed tomography to create cross-sectional images of the human body to be used for diagnosis.
- 2. "Attenuation correction" means the use of X-rays from a CT scan to construct an attenuation map of density differences throughout the body that can then be used to correct for the absorption of the photons emitted from Fludeoxyglucose (18F) decay during a PET/CT scan.

"Nuclear medicine diagnostic computed tomography endorsement" means a qualification that allows a nuclear medicine technologist to perform diagnostic computed tomography of the human body as ordered by an individual authorized by Iowa law to order radiography.

"PET/CT" means an imaging modality that uses positron emission tomography and computed tomography in one device to combine the structural anatomic information with functional data collected during the examination.

"SPECT/CT" means an imaging modality that uses single-photon emission computed tomography and computed tomography in one device to combine the structural anatomic information with functional data collected during the examination.

ITEM 2. Amend rule **641—42.2(136C**), definitions of "Nuclear medicine technologist," "Radiologic technologist," and "X-ray equipment operator," as follows:

"Nuclear medicine technologist" means an individual who performs nuclear medicine procedures while under the supervision of an authorized user. The classifications are as follows:

- 1. "General nuclear medicine technologist" performs any nuclear medicine procedures <u>and may</u> perform computed tomography for attenuation correction during PET/CT or SPECT/CT only.
- 2. "Limited nuclear medicine technologist" performs nuclear medicine procedures only as approved by the department at the time the initial permit was issued.

"Radiologic technologist" means an individual, excluding X-ray equipment operators, who performs radiography of the human body as ordered by an individual authorized by Iowa law to order radiography. The classifications are as follows:

- 1. "General radiologic technologist" performs radiography <u>and computed tomography</u> of any part of the human body.
- 2. "Limited radiologic technologist" performs radiography for the chest, spine, extremities, shoulder or pediatrics, excluding CT computed tomography and fluoroscopy.
- 3. "Limited in-hospital radiologic technologist" performs radiography of any part of the human body as approved by the department at the time the initial permit was issued.

"X-ray equipment operator" means an individual performing radiography of the human body using dedicated equipment as ordered by an individual authorized by Iowa law to order radiography. These individuals do not qualify for a permit in any other classification. The classifications are as follows:

- 1. "Podiatric X-ray equipment operator" performs radiography of only the foot and ankle using dedicated podiatric equipment. Studies using CT computed tomography, fluoroscopy, or nondedicated equipment are prohibited.
- 2. "Bone densitometry equipment operator" performs bone densitometry using only dual energy X-ray absorptiometry equipment. Studies using CT computed tomography, fluoroscopy, or nondedicated equipment are prohibited.
  - ITEM 3. Adopt the following **new** subrule 42.6(4):
- **42.6(4)** An individual applying for a nuclear medicine diagnostic computed tomography endorsement shall:
- *a.* Maintain an active permit to practice as a general nuclear medicine technologist. Endorsements may not be held without an active permit.
  - b. Submit proof of a passing score on the ARRT or NMTCB computed tomography examination.

[Filed 7/12/17, effective 9/6/17] [Published 8/2/17]

EDITOR'S NOTE: For replacement pages for IAC, see IAC Supplement 8/2/17.